

REMARKS

The examiner has maintained her rejection of the independent claims 1-2 as anticipated by Bauer (US 5870759). She has indicated that the patentability arguments made in the prior response that the features on which applicant relies (e.g., choice of synchronization mode) are not recited in the rejected claims. She has also indicated that the term "proposed synchronization mode" is not sufficiently defined in the claims to prevent its being interpreted as a status.

The examiner is urged to reconsider and withdraw the rejection over Bauer, particularly in light of the amendments made to claims 1 and 2.

Claims 1 and 2 now clearly indicate what a synchronization mode is, namely, a procedure for synchronizing two databases. The specification provides specific examples of synchronization modes (page 9). The claims also now clearly indicate that the first computer makes a choice from among a plurality of synchronization modes, and sends to the second computer an identification of a proposed synchronization mode.

Claims 1-2 are directed to a notification protocol that can reduce message traffic during synchronization between two computers. A first computer makes a choice from among a plurality of available synchronization modes, and sends a notification of a proposed synchronization mode along with at least one operation under the proposed mode, all before the second computer responds with a confirmation message accepting the proposed mode. By sending an operation under the proposed mode, rather than waiting for acceptance of the mode, message traffic is reduced.

There is no suggestion in Bauer of any choice of synchronization mode, or of any scheme by which one computer has a dialog with the other computer to choose a synchronization mode. Bauer is completely silent on the possibility of more than one synchronization mode, and simply addresses the steps followed in carrying out the actual synchronization (which, because there is no choice of mode, is always done the same way).

The disclosure in columns 11 and 12 to which the examiner refers is merely steps followed in performing the synchronization. The examiner says that she has interpreted a proposed synchronization mode as the table row refresh message or timestamp, but this is not a fair interpretation of Bauer. The table row refresh message is the actual data operation sent

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between the computers to achieve synchronization. It is not a proposed synchronization mode chosen from among a plurality of modes.

The difference between data operations and the synchronization mode is made clear by the examples given in the application. At page 2, lines 1-21, four synchronization modes are described:

Before the databases can be synchronized, a synchronization mode is negotiated. Four different synchronization modes are typically available: (1) Fast Sync mode (both sides agree to send only additions, modifications, and deletions that occurred in the respective databases since the last synchronization was exchanged); (2) Semi-fast Sync mode (both sides agree to send to a database only additions and modifications, but not deletions; the responder is responsible for determining deletions that occurred since the last synchronization based on differences in the list of records); (3) Slow Sync mode (all records are exchanged; synchronization is performed based on unique record IDs and contains a full history file of previous synchronizations; a comparison of the full records themselves is not required; even applications capable of supporting Fast Sync may need to perform Slow Sync synchronization in certain cases); and (4) Full Re-Sync mode (all records are compared based on the full record contents, rather than on the history file as in "Slow Sync" mode and exchanged, except for records excluded by a filter; filters exclude, e.g., records that exceed a certain size).

The data operations are the additions, modifications, and deletions. The synchronization mode is the process by which these data operations are handled during the synchronization.

Bauer is referring to data operations, not the synchronization mode, in column 11 (and FIGS. 6A, 6B). What is described is that a client computer makes a request for a table refresh from a server computer, i.e., the client initiates a synchronization. The server responds to the request by gathering the refresh data, computing an error correction checksum of it, and transmitting the data back to the client along with a refresh timestamp. If the client is able to successfully update its database with the refresh data, then it sends an acknowledgement back to the server along with a copy of the refresh timestamp. This is the age old process of one computer asking for data, receiving it, and then sending an acknowledgement of successful receipt.

There is not the slightest suggestion in this discussion in column 11 or FIGS. 6A, 6B (or anywhere else in Bauer) of more than one synchronization mode, let alone of one computer

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notifying the other of a choice of mode. In column 11 and FIGS. 6A, 6B, Bauer simply refers to the client requesting a refresh (i.e., initiating a synchronization). There is no mention of the client proposing a synchronization mode.

It is also worth noting that even if Bauer had dealt with different synchronization modes (and it very clear does not), the reference would still fall well short of teaching the invention, which calls for the clever arrangement of having the first computer send notification of the synchronization mode along with at least one operation before the second computer returns a message accepting the proposed synchronization mode.

Accordingly, claims 1-2 are in condition for allowance.

The remaining claims are all properly dependent on one or more of the independent claims, and thus allowable therewith. Each of the dependent claims adds one or more further limitations that enhance patentability, but those limitations are not presently relied upon. For that reason, and not because applicants agree with the examiner, no rebuttal is offered to the examiner's reasons for rejecting the dependent claims.

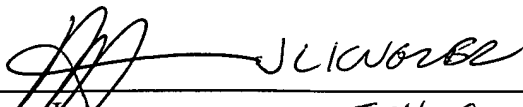
Allowance of the application is requested.

Attached is a marked-up version of the changes being made by the current amendment.

Applicant asks that all claims be allowed. Enclosed is a \$205 check for the Petition for Extension of Time fee. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 1-9-03


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Version with markings to show changes made

In the title:

Change the title to read: --Notification Protocol for Establishing Synchronization [of] Mode for Use in Synchronizing Databases--

In the claims:

Claims 1 and 2 have been amended as follows:

1. A method for synchronizing a first database residing on a first computer with a second database residing on a second computer, wherein there are a plurality of synchronization modes specifying the procedure to be used for synchronizing the first and second databases, the method comprising:

the first computer making a choice of a proposed synchronization mode from among the plurality of synchronization modes, and transmitting to the second computer a notification of the proposed synchronization mode and at least one operation operative on a record stored in the second database; and

the second computer returning to the first computer a confirmation message accepting the proposed synchronization mode,

wherein the at least one operation is transmitted to the second computer before the second computer returns to the first computer the confirmation message accepting the proposed synchronization mode.

2. A computer program, residing on a computer-readable medium, for synchronizing a first database residing on a first computer with a second database residing on a second computer, wherein there are a plurality of synchronization modes specifying the procedure to be used for synchronizing the first and second databases, comprising instructions for causing:

the first computer to make a choice of a proposed synchronization mode from among the plurality of synchronization modes, and to transmit to the second computer a notification of

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the proposed synchronization mode and at least one operation operative on a record stored in the second database; and

the second computer to return to the first computer a confirmation message accepting the proposed synchronization mode,

wherein the at least one operation is transmitted to the second computer before the second computer returns to the first computer the confirmation message accepting the proposed synchronization mode.

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